



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink-L23

Issued: 4 Apr 2021 / 0800L (1200Z)

Valid: 7 Apr 2021 / 1134 – 1237L (1534 – 1637Z)



Forecast Discussion: A large area of high pressure over the southeastern US will gradually sink southwards over Florida through the first half of the upcoming week, remaining the dominant driving weather feature for the Spaceport. The next few days will see pleasant Spring weather as the high center relocates over the state, with diminishing winds and temperatures warming back above normal. Dry conditions will continue into the primary launch attempt on Wednesday, with only a small threat for passing cumulus clouds as the main weather concern.

The high center will retreat southeast of the state going into Thursday, with prevailing flow becoming more southerly. Overall airmass will remain dry, with a small increase in moisture bringing in scattered cumulus and mid to high clouds. The primary weather concerns for the backup launch attempt on Thursday are cumulus clouds and thick mid-level clouds.

Launch Day	Probability of Violating Weather Constraints							
	10%	Primary Concerns: Cumulus Cloud Rule						
	Weather Conditions					Additional Risk Criteria		
	Weather/Visibility:	None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	78°F / 60%	Cumulus	Few	3,500	7,000	Booster Recovery Weather:	Low
	Liftoff Winds (200’):	140° 5 - 10 mph					Solar Activity:	Low
24-Hour Delay	Probability of Violating Weather Constraints							
	20%	Primary Concerns: Cumulus Cloud Rule, Thick Cloud Layer Rule						
	Weather Conditions					Additional Risk Criteria		
	Weather/Visibility:	None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	81°F / 60%	Cumulus	Scattered	3,500	7,000	Booster Recovery Weather:	Low
	Liftoff Winds (200’):	190° 7 - 12 mph	Cirrus	Scattered	18,000	22,000	Solar Activity:	Low
Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.								
Next Forecast Will Be Issued		5 Apr 2021						